

TRAIL & Landscape

A PUBLICATION CONCERNED WITH
NATURAL HISTORY AND CONSERVATION



TRAIL & LANDSCAPE

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THE OTTAWA FIELD-NATURALISTS' CLUB

- Founded 1879 -

President: Dr. T. Mosquin, Box 86, Aylmer East, Quebec
Secretary: Mr. A. W. Rathwell, Can. Wildlife Service

Objectives of the Club: To promote the appreciation, preservation and conservation of Canada's natural heritage; to encourage investigation and publish the results of research in all fields of natural history and to diffuse information on these fields as widely as possible; to support and co-operate with organizations engaged in preserving, maintaining or restoring quality environments for living things.

Club Publications: THE CANADIAN FIELD-NATURALIST, official journal of the Club, devoted to the publishing of research in natural history.
TRAIL & LANDSCAPE, a non-technical publication of general interest to local naturalists.

Field Trips, Lectures and other natural history activities are arranged for local members.
See inside back cover.

Membership and Subscription Fees:

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YOU ARE INVITED TO BECOME A MEMBER

TRAIL & *Landscape*

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THE OTTAWA FIELD-NATURALISTS' CLUB

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18 Briarcliffe Drive
Ottawa 9, Ontario

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THE ANNUAL BUSINESS MEETING

Tuesday December 8th was the first cold "winter" night of the season, which may account in part for the small turnout of about 40 persons at our Annual Business Meeting. President Ted Mosquin welcomed the members and copies of the Report of Council were distributed to each. This 8-page report covering the year's activities of every Committee of the club was summarized verbally for us by the Secretary. Questions were answered concerning the Report and Financial Statement.

The President then spoke briefly about the Club's affairs over the past year, pointing out that we have grown by 20% since the last Annual Meeting. He spoke enthusiastically about the coming annual meeting of the Federation of Ontario Naturalists to be held at the Skyline Hotel in April; as the host club he hoped that many OFNC members would participate. The Federation's Executive Director, Gerald McKeating, was present and added a few hints of the coming attractions being planned for the event.

The Election of Officers for 1971 was conducted by Ewen Todd. These were elected to executive positions:

President: Theodore Mosquin

First Vice-President: Sheila Thomson

Second Vice-President: Irwin Brodo

Secretary: Alexander Rathwell

Treasurer: Montgomery Brigham

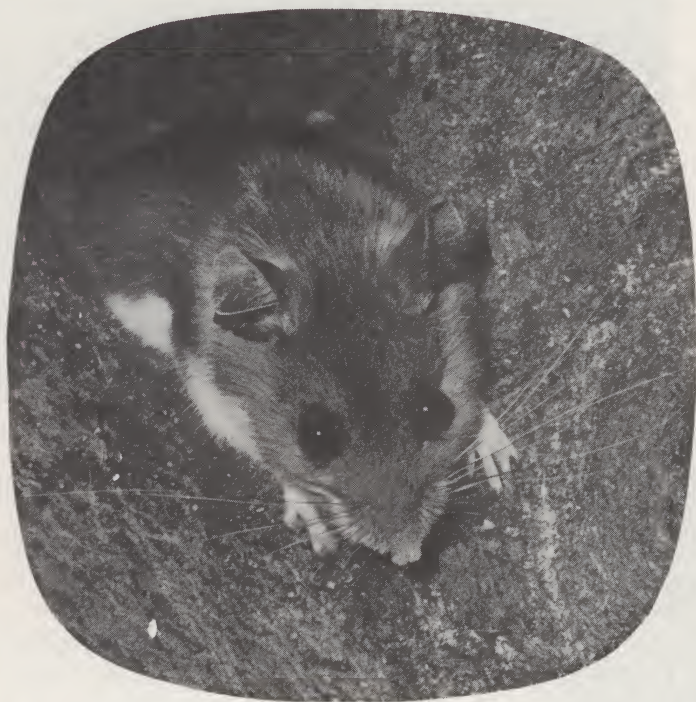
In addition, 17 other members of the 1970 Council were re-elected, and 13 new members were added, giving a total of 35 members for the 1971 Council. The new council will be stronger in professional members of the biological sciences.

An innovation at this meeting was the presentation of several Resolutions. These were re-worded and polished with much help from participating members, and three were carried.

A break for coffee, donuts, and socializing was followed with a showing of slides from the National Collection of Nature Photographs accompanied by an able commentary given by Brian Morin.

A.H.

Glimpses into the life of a



WHITE-FOOTED MOUSE

By Donald A. Smith and Lorraine C. Smith
Department of Biology, Carleton University, Ottawa

'Click' went the trap under a branchpile beside our camp and within minutes the whip-poor-will began to call. The whip-poor-will started calling at dusk most evenings during July and early August here as in many other places but the click was a special sound our family had become accustomed to listen for each evening as the light began to fail, for we had a favourite and regular visitor.

1



2 Tag in 1611's ear
is $\frac{5}{16}$ in. long



3 Live-trap at S



We first saw him on June 10, 1969. He had been caught overnight in one of the live-traps which we had set the day before in the mature mixed hardwood forest at Stanley Corners, 8th Concession of Goulbourn Township, Ottawa-Carleton, where our new home was under construction. He was a young adult white-footed mouse (Peromyscus leucopus noveboracensis), dull brown above and white below, long-tailed, bright-eyed and big-eared (Photo 1). In his right ear we placed a small metal fingerling tag (Photo 2) bearing the number 1611 and then released him at the base of the big double maple tree where he had been trapped. He ran quickly around the base of the tree and was gone. We saw him twice more during June when trapping was done mostly on weekend visits and then fairly regularly after the 28th of June when we moved our family to the tent-camp which was to be our home for the next three months while our house was being built beside it.

Live-traps

Our live-traps (Photo 3) are 3 in. x 3 in. x 12 in. boxes of galvanized sheet metal with a treadle over which a small mammal walks to reach the bait at the rear of the trap. Its weight depresses the treadle, releasing a spring-loaded door which shuts behind it. The captive mouse may then eat the bait mixture of peanut butter and rolled oats, or the sunflower seeds or corn kernels placed therein. It usually builds a nest of the terylene batting which is also provided, and there remains until released. Our traps were generally checked first thing in the morning to release the nocturnal mammals such as white-footed mice, and just before dark to release the day-active chipmunks which abound in our woods. During the late fall and winter, after our chipmunks were in hibernation, the evening check was postponed until just before we retired. Thus by using a miner's headlamp for light we could release mice captured by midnight or 0100 hours on that run and the later captures the next morning, so that none was forced to spend the whole night in a trap.

In the belief that mice frequently make use of 'cover' in moving from one place to another, and for ease in locating them, we usually set our traps at the bases of large trees (usually sugar maples, American elms or basswoods) or beside logs, woodpiles (of fire-



4

Logpile M in January.
Trap is behind snow
in left foreground.



All photos by
D. A. Smith

5

1611 entered vertical
slit half-way up the
stub at left top in
sugar maple at S.

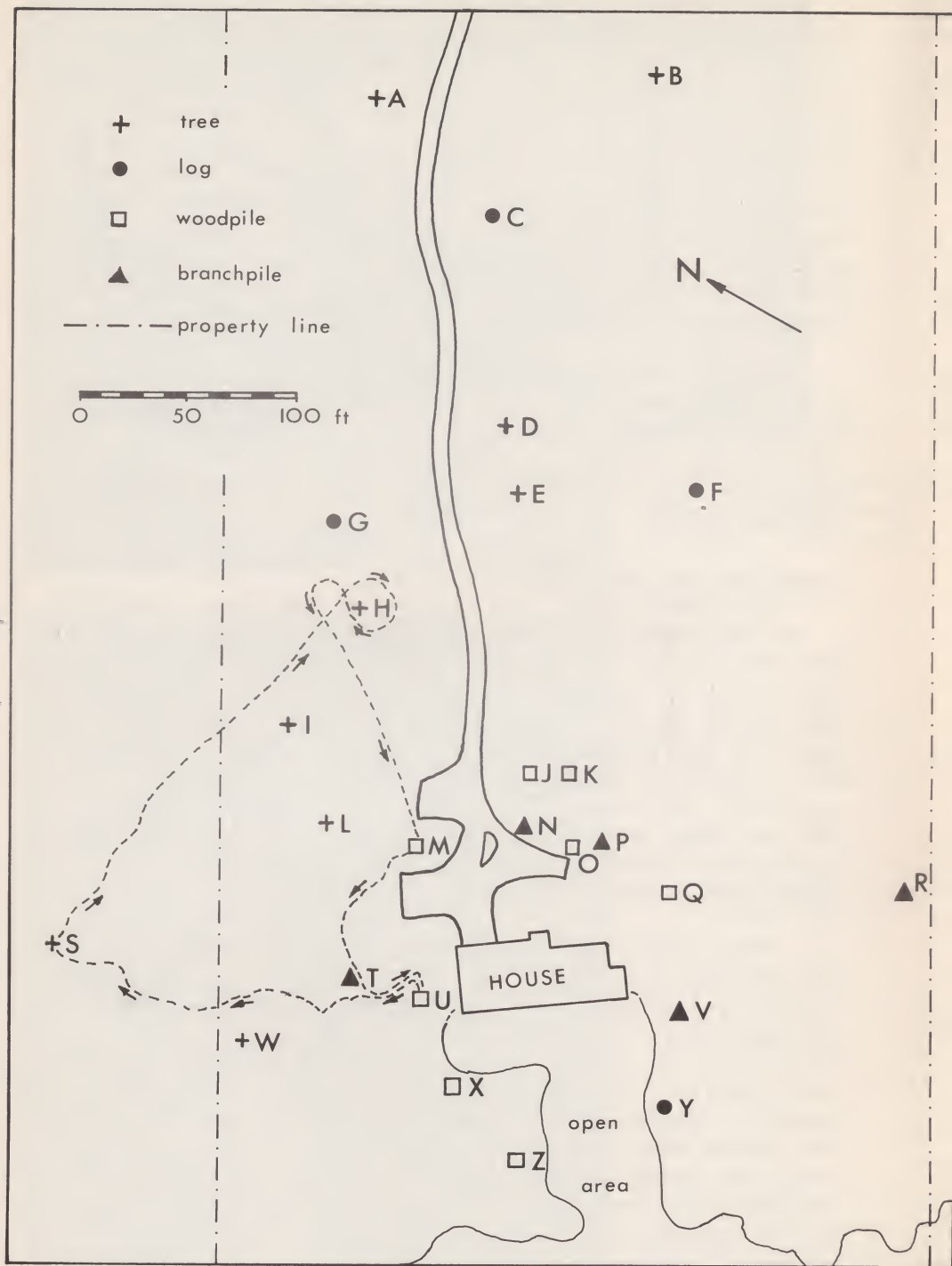
place logs or lumber scraps - Photo 4) and branchpiles. For most of the summer, five live-traps were in operation daily, although the number set in September and October varied from two to ten per night. Between late October and the end of January, 10 traps were set nightly, and thereafter 15. Unfortunately, from mid-November on, some or all traps were inoperative on certain nights because they were frozen up or filled and covered with wind-blown snow, until cleared on the next regular check. Only occasionally was it necessary for us to suspend trapping for one to a few days because of other activities.

During the summer and autumn, the traps were frequently shifted from place to place throughout our woods, but this was done relatively rarely in the winter. Then most of the traps were placed in sheltered spots beside woodpiles near our house so they could be located and checked easily.

Locations and Frequency of Captures

Our mouse, 1611, was trapped at one time or another at the 26 locations labelled A to Z on the sketch map of part of our own and neighbouring properties (over page). Trap sites at which he was not captured are not shown but he was taken at most of the locations near our house, and at a decreasing proportion farther away. As 1611 was a member of what is generally considered as a nocturnal species, it was rather surprising to find that on eight occasions (six of which were in November) he entered a trap during daylight hours (mostly between late morning and early afternoon).

When 1611 was released from a trap he generally ran quickly to cover under a nearby woodpile, branchpile or log, or scampered over the forest floor around trees and was gone. Only once, in July, did he 'freeze' motionless for a few seconds upon release before running into a hollow log. Occasionally he ran up trees into a hollow or split. Sometimes upon release from the trap set in the snow at the base of the big maple at S, he would run under a nearby small log, popping in and out various holes under it. One night he dug into the snow beside the base of the tree and peeked out. When we retreated 20 feet away, he climbed the tree and entered a slit 26 feet above ground in a dead upright branch stub where it was assumed he had a nest (Photo 5).



Map of part of trapping area showing sites of capture of mouse 1611 (A to Z). Trap sites at which he was not captured were scattered over most of our part of the woods to its edge 180 ft. beyond top of map. Broken line shows his route on evening of Jan. 29.

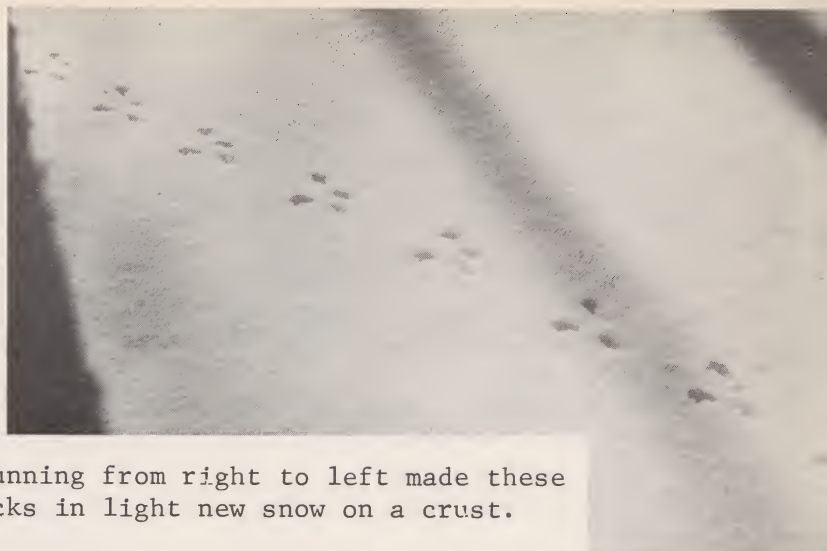
Three periods roughly corresponding to the seasons were arbitrarily chosen and Table I shows how our 252 captures of 1611 were distributed therein.

Table I	No. of nights traps set	No. of nights 1611 caught	No. of captures of 1611
Summer (June 10 to Sept. 30)	94	61	103
Autumn & early winter (Oct. 1 to Dec. 31)	92*	57	80
Winter (Jan. 1 to Mar. 15)	74*	57	69

* Sometimes traps inoperative because of snow or ice.

During the summer trapping the longest interval in which 1611 was not caught in a trap was three nights, whereas once in the autumn we didn't see him for two weeks (Sept. 28 to Oct. 11). During the rest of the autumn and winter, however, he rarely missed more than one or two nights at a time. We soon labelled him a 'trap addict'. Presumably he liked the bait and the 'comfortable' sheltered quarters with the soft warm nesting material. Some nights he seemed determined to stay in a trap. The discrepancies between the numbers in the last two columns of Table I indicate that on many nights he was caught more than once. Some nights he would re-enter the same trap in from one minute to an hour or so, and once he was released from one trap three times within ten minutes! Other nights he would try out more than one trap. One time, only 20 minutes after he had been released at U, he entered the trap at P, about 110 feet away. From time to time when traps were moved to new locations, 1611 seemed to have had no difficulty in finding them. Not only did he seem addicted to traps in general but he also seemed to favour certain locations as noted in Table II. One to ten captures were made at each of the other 21 trap sites on the map. Note that while he was captured most often at P in the summer, the fact that he was caught most often at U and M in the autumn and winter seems to indicate that his centre of activity had shifted. His home

6



A mouse running from right to left made these clear tracks in light new snow on a crust.



7

A mouse running in about 1 in. of snow made indistinct tracks, but tail mark indicates its direction.

8

1611's tracks reach maple at S (right) from near our house 190 ft. away. Note old tracks of black squirrel in foregr'd



Table II	Number of captures at				
	P	J	U	O	M
Summer (June 10 to Sept. 30)	49	4	0	0	0
Autumn & early winter (Oct. 1 to Dec. 31)	4	8	19	12	35
Winter (Jan. 1 to Mar. 15)	11	13	14	7	19

range also changed considerably with the seasons. The home range is the area around its home site over which an adult mammal travels in its normal round of activities such as food-gathering, mating and caring for young. During the summer 1611 was taken at 21 trap-sites and we estimated his home range at about two acres. During autumn and early winter, he was taken at only seven sites, and at only six in the winter; all but one of these sites were near the house, although traps were set elsewhere at times. His estimated home range was only about one-quarter acre during these seasons.

Travels

While trapping provided us with certain data on our mouse's whereabouts, it left us to speculate on his activities between captures. We knew that in the summer he travelled considerable distances through the hardwoods between captures, although often returning to the trap at P. For instance, on consecutive summer nights he was taken at P, H, H, C, Y, G and P. During the autumn his travels appeared to be much restricted and from Dec. 14 to 28 he was taken 13 times at U and nowhere else.

With the arrival of ground-covering snow at the end of December, however, we could trace a mouse's excursions by following its tracks, especially in fresh snow (Photos 6 & 7) and thus supplement the trapping data. Except when the snow was crusted and didn't show tracks, we assumed when no tracks led away from a mouse's point of last release that it had remained there - in the case of 1611, this was from one to three days. Trapping almost invariably supported such assumptions.

Tracking showed us that 1611's home range during the snowy season was quite restricted near our house (mostly around U, M, J, O & P) as we had suspected during the autumn, but it also revealed another of 1611's favourite retreats previously unknown to us. This was the big sugar maple at S in our neighbours' lot (Photos 5 & 8). His usual route to S started at U and was both interesting and typical of the routes followed by his fellow occupants of our woods. From beneath the logpile at U, he ran over the snow to the end of a log and disappeared under it. His tracks reappeared at the far end, extended a few feet to a pile of branches mostly covered by snow and disappeared beneath it, only to reappear from under a small log at the far end. From here tracks extended towards S, mostly going from tree to tree, as seen in Photos 9 & 10, but not always visiting exactly the same trees. At night after release, he usually was seen to run to a tree trunk and briefly shelter in the wind-blown hole around it before running on to the next tree, and ultimately to S where he usually climbed the big maple. Only rarely did he or any of our other mice use tunnels in the snow other than those under logs or branches which supported the two feet or so of snow which covered the forest floor. They almost invariably ran on the surface of the snow, even in sub-zero temperatures.

As the tracks became more numerous on the route between U and S (Photo 11), individual paths could not always be traced but for quite a while there were no paths anywhere else. After a fresh snow, new tracks could be readily distinguished from old ones (Photo 10). On Jan. 20, 1611's tracks for the first time headed from S directly towards M, just as though he intended to go there and then via T on the branchpile-log route to U. On Jan. 25 he went from U to S in four inches of new fluffy snow. Presumably because visibility was poor, he wandered much more than usual. On the evening of Jan. 29, there were fresh tracks in 1/8 inch of new snow on a frozen crust. These were ideal conditions for following 1611's rather longer than usual wanderings and we have marked them on the sketch map. He left S, went east from tree to tree, ran around a big maple and elm (H), came back to M (where mouse A35 was in the trap), then continued on the branchpile-log route to U where he ate the bait out of the trap which was

frozen open, then retraced his steps through the branch-pile, and continued back to S. Thus tracking showed that we had seriously underestimated 1611's home range by using only trap data; he really occupied about 3/4 acre in the winter.

Relations With Other Mice

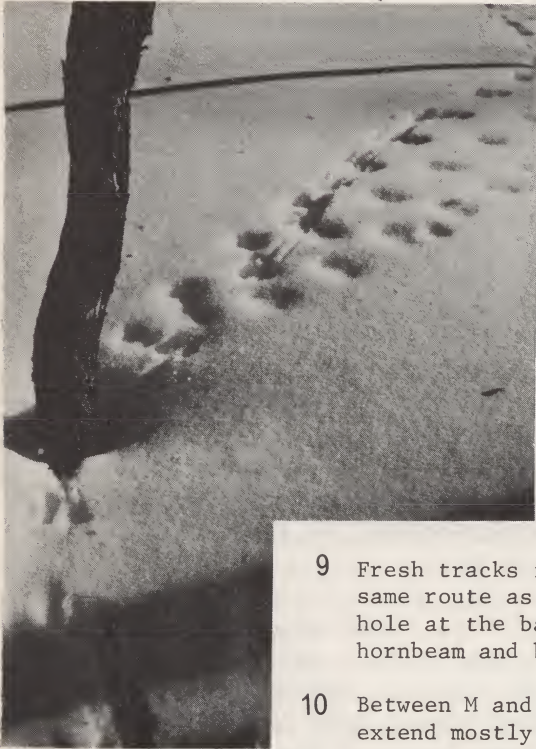
During the trapping period we tagged other white-footed mice, but there rarely seemed to be more than half a dozen occupying our woods at any one time. Various mice frequented the same trap-sites and we assumed that they had some kind of nests at these locations, especially in the colder weather. Did each mouse have its own personal nest or were the nests shared? We were most surprised on the evening of Oct. 21 when 1611 was found in the trap at J to discover that he was not alone. As it seems impossible for a second mouse to enter the trap once the door shut, one must, therefore, conclude that the two mice entered the trap together. The companion of 1611 was A18, a female mouse which had been tagged on Oct. 14, 1969 at X and subsequently caught five times at U. She was caught once at P and once at J before being caught with 1611 again, this time at U. Once more on Feb. 9 they were found together - in the trap at P.

On Jan. 10 1611 went from S to U and was released about midnight. The next morning another male mouse, A35, was in the trap at U while 1611's tracks showed that he had returned to S. That night 1611 was in the trap at U and A35 must still have been in the woodpile as no tracks led out and in fact he was in the trap there the next morning. Again on Jan. 15 1611 was released from the trap at U; the following morning A35 was in it and 1611's tracks led to S. On Jan. 17 his tracks led from S to U and back again to S making one wonder if he was frustrated because A35 was in the trap at U. On Jan. 18 his tracks again came to U (where A35 was in the trap) but this time he continued on to M. After release from the trap at M, he returned to S. A second trap was set at U and on Jan. 27, A35 and 1611 were taken in the two traps.

On Feb. 3 a new female mouse, A41, was in the trap at U. Her tracks led to U from 1611's nest tree at S by a zig-zag route not characteristic of 1611. Later

on A41 was trapped several times at Z and subsequently tracks led from there to the end of the log running west from S, from which she had access to 1611's nest tree.

Certainly 1611 and these other mice shared the same wood-piles etc. from time to time and we presume that they may also have shared the same nests.



9 Fresh tracks in new snow follow the same route as the old tracks to the hole at the base of the small hop hornbeam and beyond.

10 Between M and U, 1611's routes extend mostly from tree to tree.

11

Part of 1611's highway between U (near house) and S. Traces of old tracks in right foreground.



Fate

The ultimate fate of 1611 can only be conjectured but there are some clues from which we have drawn some conclusions. He was released from the trap at M for the last time just after midnight on Mar. 15. At 9 a.m. fresh tracks were seen leading northwest from M to a hole in the snow under the end of a snow-covered log 20 ft. west of his big maple at S. From this hole in the snow there was a tunnel under the snow along the log to the base of the maple in which the mice were thought to have a nest. Another set of mouse tracks coming in from the NW also led to the same hole. Two traps were set at the hole as it was assumed that two mice must be in or near the tree or log. The following morning there were no mouse tracks leading away from the hole. There were, however, black squirrel tracks around the tree and traps, and, what is considered most significant, a set of tracks thought to belong to an ermine. These tracks were around the traps and at the tree end of the snow tunnel. One can thus speculate that the ermine followed a mouse into the hole and along the tunnel and somewhere along the route he found 1611 and ate him. The other set of mouse tracks that led to the hole probably belonged to A41 who somehow managed to escape the same fate as 1611 for she was in the trap at S on Mar. 18.

After such interesting glimpses into the life of 1611, it goes without saying that we really missed not seeing him again. However, our woods are inhabited by other mice whose lives are, no doubt, as interesting to glimpse into, and we are continuing to accumulate information on them.

While every naturalist will not have the inclination nor home environment to carry out a field study such as ours on 1611 and his friends, we hope that some others may be interested in accepting the challenge of trying to uncover some facts about the poorly known habits of our common nocturnal small mammals. Even without live-trapping, much can be discovered by regular and systematic following of tracks, which was so productive in our investigation into the behaviour of 1611. We highly recommend that others have a try at a fascinating and somewhat different outdoor natural history activity that could uncover completely new information while providing interest and healthy exercise to the observers.

THE OFNC WINTER BIRD FEEDING STATION

Derek Munro

The Ottawa Field-Naturalists' Club is again sponsoring a very worthwhile project - the winter bird feeding station. The feeders were put up in the middle of October 1970 so that by the time this appears there will be many species of birds there with many more expected as the winter goes on. The station is again located $2\frac{1}{2}$ miles south of Bell's Corners on Moodie Drive South in the Jack Pine Nature Trails, with kind permission of the Ontario Department of Lands & Forests. The area is excellent not only for its bird life but for the wildlife, vegetation and aesthetic values. This area has proven to be of great interest to the public, judging from the numbers of people that visit the Nature Trails and then return again and again.

A great benefit of the feeders, besides their attraction to birds and confirmed birdwatchers, has been their attraction to the hundreds of people who came to look at birds for the first time. Many then walked along the Nature Trails and were introduced to other natural features. Thus the bird feeders have a definite educational value.

A book will again be provided in which to record the species of birds and numbers of each species seen during each day. Last winter's book was well used and provides an excellent record of the species seen around the feeders. Anyone with a winter bird feeder at their home will find it interesting to keep a yard book with day to day records of bird species and numbers seen. Special note can be made of unusual birds or actions.

Hopefully the birds will appear this winter in as large numbers as they did last year. Last winter the feeders were erected on Dec. 29, 1969 and ran through to May 10, 1970. During that time 54 species were recorded within a half mile of the feeders. A list of these birds follows. It is impressive, but perhaps this winter two or three new species will show up. Certainly that is half the fun of a bird feeder - having a new species visit it for the first time.

Birds of the JACK PINE NATURE TRAILS, Winter 1969-1970

All seen within a half mile of the feeders; asterisked* birds were seen feeding on either seeds or suet provided.

Great Blue Heron	*Black-capped Chickadee
Black Duck	Boreal Chickadee
Mourning Dove	*White-breasted Nuthatch
Great Horned Owl	*Red-breasted Nuthatch
Barred Owl	*Brown Creeper
Killdeer	Brown Thrasher
American Woodcock	Robin
Common Snipe	Golden-crowned Kinglet
Sharp-shinned Hawk	Ruby-crowned Kinglet
Red-tailed Hawk	Northern Shrike
Red-shouldered Hawk	Black-and-white Warbler
Rough-legged Hawk	Red-winged Blackbird
Marsh Hawk	Baltimore Oriole
Sparrow Hawk	Rusty Blackbird
Ruffed Grouse	Brown-headed Cowbird
Gray Partridge	Scarlet Tanager
Belted Kingfisher	*Evening Grosbeak
Yellow-shafted Flicker	Purple Finch
Pileated Woodpecker	Pine Grosbeak
Yellow-bellied Sapsucker	*Common Redpoll
*Hairy Woodpecker	Red Crossbill
*Downy Woodpecker	Vesper Sparrow
Northern Three-toed Woodpecker	*Slate-colored Junco
Great Crested Flycatcher	Chipping Sparrow
Eastern Phoebe	*White-throated Sparrow
*Blue Jay	Fox Sparrow
Common Crow	*Song Sparrow

Suggestion: If you have enjoyed a visit to the Nature Trails, you might wish to show your appreciation by writing to

Mr. Alf Gowdy
Greenbelt Headquarters
Department of Lands & Forests
Leitrim, Ontario

NEW SPECIES DISCOVERED

Detritus humanicus sp. nov.

Diagnosis: a member of Class Inanimata

Holotype: a specimen found on the beach near St. Andrew's, New Brunswick, catalogued as BA 1970*. Collected by James A. Burns. (*BA = Bloody Awful)

Etymology: Detritus referring to its waste-like nature; humanicus referring to its method of deposition on beach.

Description: The holotype measured some 7.5 cm. by 6.8 cm. with a thickness of about 0.9 cm. The shell-like specimen retained a concave inner surface with a convex outer surface. The latter possessed a handle-like projection of semi-circular nature attached at both ends so as to form an aperture through which the index finger fits easily. The background colour was white with a multicolour embossed pattern on it, and both sides were finished in a type of glazing. It was opaque.

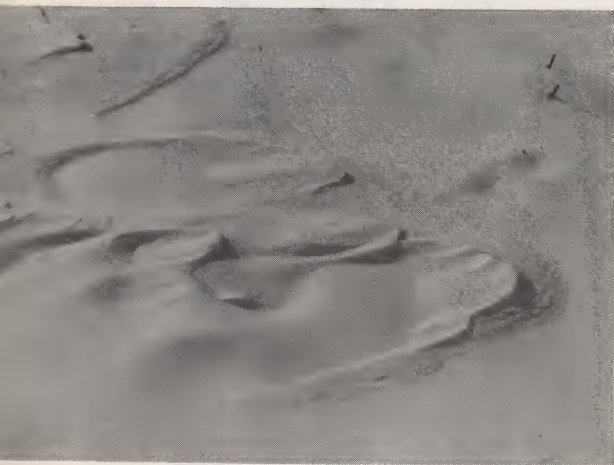
Other specimens, however, possessed very odd shapes (e.g. dish-like), sizes, colours, and differing degrees of transparency - some quite clear (e.g. bottle-like). The edges on all are usually quite sharp, enough so that they cut the feet if trodden upon.

Distribution: Known collections are few, yet not for lack of material. Though the holotype was found at Sand Point, Charlotte County, New Brunswick, the ubiquitous nature of Detritus humanicus sp. nov. seems to go largely unnoticed, even in its natural habitat - public beaches. Not solely a marine inhabitant, it has been found inland at Grand Lake, New Brunswick, 40 miles east of Fredericton, as well as being noted in many public areas along the Ottawa River in the environs of the City of Ottawa.

It appears, therefore, to be a very hardy species, capable of existing in or near any aquatic environment, fresh or salt. Further investigation would probably bear out the theory that its existence is universal.

Nature Puzzle No. 4

Anne Hanes



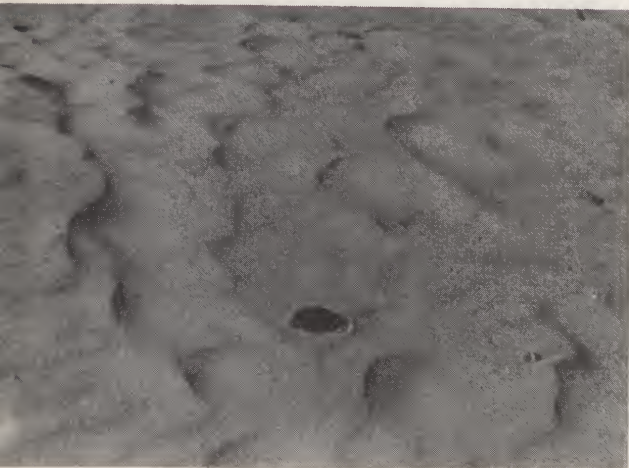
Wind-sculptured snow, March 1970



WHICH WAY DID THE WIND BLOW?

The wind direction was the same in the two snow scenes. Did it blow from right to left, or from left to right?

Wind-sculptured sand, August 1970



And which way do you think the wind blew over the sand?

WHO'S WHO IN CONSERVATION

Have you heard of most of these organizations, vaguely thought they sounded worth supporting, but never had pen, paper, envelope, chequebook and address at hand together? We've tried to make it easy for you by listing some of the major Canadian conservation organizations. Your support helps them be effective on your behalf and helps keep you informed.

Algonquin Wildlands League
Box 114
Postal Station O
Toronto 7, Ontario

Membership \$2.00 a year. Publishes WILDLAND NEWS (mimeo) bimonthly. Formed originally to defend Algonquin Park from logging, it acts as a watch-dog for all provincial parks (see next page).

Canadian Audubon Society
46 St. Clair Avenue East
Toronto 7, Ontario

Membership \$6.00 a year. Publishes CANADIAN AUDUBON magazine five times yearly. Purpose is to promote conservation through education and research.

Federation of Ontario Naturalists
1262 Don Mills Road
Don Mills, Ontario

Individual membership \$7.00 a year; family, \$8.50. Publishes THE ONTARIO NATURALIST quarterly. The YOUNG NATURALIST, for children, is published 10 times yearly; subscriptions are \$2.00. Purpose is to protect the natural heritage of Ontario by informing the public, co-operating with other organizations, carrying on research, making representations to government, etc.

National & Provincial Parks Assoc'n of Canada
43 Victoria Street, Suite 18
Toronto 1, Ontario

Individual membership \$5.00 a year; family, \$6.50. Publishes PARK NEWS at intervals. Purpose is to promote the quality and quantity of parks. Ottawa-Hull residents should join it through the Ottawa-Hull Chapter, NPPAC
Box 6242, Station J
Ottawa 13, Ontario.

MULTIPLE-USE WILDERNESS IN ONTARIO

There are lakes in Quetico where people have not yet brought machines: where you can see virgin forest, listen at night to an owl, and dip a tin cup over the side of a canoe to drink clean water. These lakes are an experience achievable only by several days' exertion with paddle, canoe, and pack against natural obstacles. The rewards are primordial silence and a sense of attunement to natural rhythms, to replace city pressure, noise, and schedules.

Any possibility of such a wilderness experience may soon be lost to the Ontario government's multiple-use approach to provincial parks, under which logging is getting under way on over half Quetico's area. Domtar Ltd., which holds cutting rights to 468 square miles of Quetico, is preparing to sell them to Ontario-Minnesota, a subsidiary of the U.S. firm Boise Cascade, giving the latter rights to cut 880 of the 1750 square miles in Quetico. Previously, small-scale winter cutting was done in one corner of the park; but this is the first full-scale logging operation. It means not only the destruction of virgin ("over-mature") forest, obliteration of canoe routes and portages, but noise of heavy machinery and building of permanent-quality roads, with the danger they will later be used to permit access of motorboats.

The Algonquin Wildlands League is urging that Quetico be given protection as a primitive park. Legislation exists for this purpose. According to the Ontario government's 1967 system of park classification, the purpose of a primitive park is to set aside representative areas of natural landscapes for posterity and to provide an opportunity to enrich and expand the outdoor knowledge and recreation experience in natural wild conditions....the natural resources reserved from exploitation.

Ontario's only primitive park is Polar Bear; it is unforested, accessible only by aircraft, and unlikely to be visited by many southern Ontario residents. Quetico is within reach. If you value wilderness and the possibility of a wilderness experience in Ontario for your children, tell your government NOW. B.J.C.

Mobile Menace, with treads

"The harassment of wildlife is one of the major problems conservation agencies see in the growing use of snowmobiles. Perhaps the problem has its source in the fact that the majority of snowmobilers are not old-line outdoorsmen. They are new to the outdoors, particularly in winter. Most desire to take photographs of wildlife and the hazing of big game animals may be done mostly through ignorance because of this. The snowmobiler may not realize that his desire to get near enough for photographs may mean the difference of life or death to an animal.

"Many big game animals have little energy reserve and are only a meal or two away from starvation toward the middle and end of winter. This reserve can be depleted and the animals left physically exhausted if forced to buck through deep snow in a futile effort to elude curiosity seekers."

Ontario Department of Lands and Forests
NEWSLETTER December 1969

"When we go into the Park, we don't act like a bunch of fools. If we see a deer, then we take pictures of him, and stop the machines to make sure he isn't scared."

Spokesman for snowmobile clubs
protesting Gatineau Park ban,
OTTAWA CITIZEN October 1, 1970

and the four-legged variety

"Dog owners should keep a watchful eye on their pets for the remainder of the winter. If a dog disappears for an hour or two in the morning, likely it has gone hunting, and if it picks up the trail of a deer it may mean death for the dog and a court summons for the owner. The department of lands and forests points out that it is an offence to permit a dog to be at large in the bush at this time of year, and that dogs found tracking deer can be shot by conservation officers. So any dog with a tendency to leave home is likely to get itself and its owner into trouble."

Ontario Department of Lands and Forests
NEWSLETTER January 1970



Beaver-watching?

Rosemary Gilliat

When I was seven the long-winded poem *Hiawatha* was read out loud to me and I was captivated. This childish impression was indelible, and ever since I've had a reverential feeling for beaver - knowing that they could change a person into a beaver....and so on. It was unsettling to hear, on coming to Ottawa, that these mythical creatures were alive and real and could actually be seen cutting down trees in Gatineau Park - only half an hour's drive from Canada's capital.

However, my friend Anna Brown and I hurried off to Lac Philippe to see these legendary beaver. We found a lumbered area where poplars had been cut and had fallen towards the lake, and then we deduced, with growing excitement, that the dome-shaped brushpile at the water's edge must be a beaver lodge. After crashing around examining stumps and chips we focussed our cameras and waited confidently for the beaver to emerge and be photographed. The peaceful day wore on (Lac Philippe was a tranquil place in those days), the sun shone and the water rippled and nothing happened. Nothing at all. We were disillusioned, if not agrieved. We made several equally futile visits there.

Why at this point we didn't enquire about beaver and their habits, escapes me. We just spent every weekend in the park and made our own accidental discoveries.

In the course of bush-whacking we photographed beaver works galore: gnawed stumps, lodges, twice-cut 'totem' trees and chips - I found one white birch chip near Lac Charette that measured seven inches, which is quite an awesome bite. We photographed all kinds of dams, from embryonic barriers of mud a few inches high to dams many years old which were nearly as tall as a person. We photographed plunge holes and a canal - but the beaver remained elusive. We knew they were there by the tantalizing slap of a tail or by a blue swirl in the water which shattered the tree reflections in the beaver pond. It took us some time to realize that beaver were mainly nocturnal, then we spent many evenings lugging heavy camera and flash equipment up bush trails in the dark, and trying to focus a telephoto lens on the minimal target of a swimming beaver on a pitchy night, and to fire a flash at it. We had no luck. We evidently judged beaver by ourselves and if we didn't smell them it never occurred to us what highly sensitive noses beaver had or that the wind was probably wafting an overpowering scent of humans in their direction. It was maddening to hear of luckier people, especially the Trail Riders (the hard-working group that takes care of the ski trails) who were positively allergic to beaver, and who seemed to be tripping over them constantly in broad daylight.



Every hiker knows that
dams make good bridges



Varying snow
levels and a
persistent
beaver make a
'totem' tree

Though we were slow in learning about beaver and hopeless at photographing them we soon learned what a marvellous place a beaver pond was. We would always sneak up to one as quietly as we could, hoping to see any wildlife that might be there, and then settle down and wait for things to happen. One beaver family with two kits didn't seem to mind our presence or flashlights but gnawed twigs just out of camera range. The kits kept up a sad little conversation that sounded like the plaintive whining of children. I loved to watch a beaver swim - trailing a silver V in the water. Its movement was as smooth as oil and looked as easy as the flight of a planing gull. More often than not one

never saw a beaver at all, which is why I call this most relaxed and pleasurable of pastimes "Beaver-watching?". It is the perfect antidote to city living. At dawn or dusk you are sure to see some action; it might be a mink, a Pileated Woodpecker gouging grubs from a dead tree, some deer, or a young bear pigeon-toeing its way along a mossy log to have a drink. Beaver ponds are at their loveliest in the fall when those wild colours are mirrored in the water and a lodge can look like a flower garden when the beaver have jammed scarlet, gold and green branches in the mud around their lodge for part of their winter food supply. (Outside the Park it would be rash to haunt beaver ponds in the fall because of the shoot-at-sight hunters.)

When skiing cross country we always checked the tracks around a beaver pond; the commonest were fox, sometimes mink or weasel, and once we found a snow-covered beaver lodge that had been used as an otter slide. In very cold weather the "chimney-hole" of an occupied lodge would be frosted up with crystals by the beavers' breath and body-warmth. If you put your ear right down to a chimney you might hear movements or faint bubbling noises. An unwary skier can turn the air bluer faster than anyone I know when he skis too close to a snow-covered beaver dam at 20° below and puts a ski 'through'. The warmer water flash-freezes on his skis and he needs otherworldly restraint and a blowtorch to restore a running surface to his skis. If the beaver run out of food before spring they have to leave the lodge to replenish supplies and then snow-prints of those large, webbed hind feet may be seen.

One January evening Anna and I skied past a hill-side where we saw a partially-felled tree and skid marks leading to a hole in the ice. "Aha!" we thought, "Now we've got them." and set up camera, tripod, flash and a tripwire with patent release lent by a mechanically-minded friend, and made from some part of a motor bike. Elated we went back to our cabin. That night the moon was brilliant and two of our friends out skiing saw our rig and proposed crawling through the tripwire on hands and knees "to give you girls a rare shot of wild nightlife in the park". As it turned out, it was 10° below and the flash batteries froze anyway.

photos
Rosemary
Gilliat

Snow-
covered
lodge in
winter



"One of the
biggest
lodges I
had seen"

Late April was a good time to explore beaver country and some friends took me by canoe to look over a hidden marsh which hummed with life. We slid by one of the biggest beaver lodges I had seen. We put up several pairs of Black Ducks, a Great Blue Heron, Kingfishers, Tree Swallows, Flickers, two pairs of American Mergansers, and we watched a pair of Ospreys mating.

On a showery April afternoon, Anna and I saw two beaver emerge from their lodge. For once the wind must have been blowing in our direction as one of the beaver came within seven feet of us. We held our breath as it combed its wet, spiky fur and then began scratching, probably tormented by the winter's lice. It scratched and scratched and scratched, so compulsively that we began to itch ourselves and had an awful time suppressing any movement that would scare the beaver. Its mate was puddling around at the pond's edge, heaping up small mounds of mud, then it sat down firmly on a mud patty. I realized later that this must have been a castoring place. I had always enjoyed Joe Lavalley's* account of the uses of beavers' Castoreum:

"It's this way", he said, "it's like a sort of juice, and there's special parts they have just under the tail to make it. Now if a beaver is going someplace and he wants the other beavers to know where it is, he makes one of these castoring places. Then he takes a stick and rubs it on his behind until there's some castor on it. After that any other beaver can come along, smell the stick and know where the first fellow's gone, upstream, downstream or where." "You mean they write messages to each other by rubbing sticks on their bottoms?" I asked in astonishment. "That's about how it is," said Joe. "Say there's a beaver wants a mate very bad. He's tired of being alone, and wants to take a wife, and he doesn't see just what he fancies around. What does he do? ... he says what he wants with his castor. And I reckon it's pretty smart to be able to do that."

Well, beaver are known to leave messages, even if not precisely along these lines, and ever since reading Joe's remarks I've checked castoring places. But my jaded senses have never revealed anything more than the usual whiff of decaying swamp, common to beaver ponds. I was shown shrivelled pairs of these castor glands hanging up in a cabin to dry out. Apparently one of their many uses is by trappers, as many animals are attracted by the musky scent.

*"Joe Lavalley and the Paleface" quoted by courtesy of Collins, Toronto. Joe was said to have been an Algonquin Park guide at the end of the second world war.



Whether it's a hangover from Hiawatha or not, I don't know, but I derive a certain gleeful joy when beaver (like bad weather) occasionally bring parts of our great technological society to a standstill, as when their works halt a transcontinental train or hold up such major projects as the construction of the Trans Canada Highway. I know beaver make inconvenient neighbours and have to be controlled. As a ranger said, "everyone loves beaver till he has to live with them." I know they infuriate farmers by damming fields, homeowners by felling their best ornamental trees, park authorities and lumbermen by flooding valuable woods, and I realize that their various capers cost the taxpayer a lot in highway and railroad repairs - but I'm a hopeless beaver-addict, and I am disturbed at the implications of the NCC Development Concept as regards beaver. If the planners are out to tame 60% of our unique wilderness park (what other capital city is lucky enough to have one?), I foresee that such animals as inconvenient bears and manic dam-building beaver will be unacceptable in this landscaped people-park, and will be banished. The only beaver you'll be able to observe will be behind bars ("See our native fauna in Gatineau Wildlife Zoo"). I hope I'm wrong, and that beaver-watchers? and their allies will fight the plan. And I trust that the beaver out there in their lodges are figuring out what they can turn an NCC Planner into.....



GATINEAU PARK STREAM, JANUARY

Anne Hanes

Black and White Photographic Competition

ON THE THEME OF CONSERVATION

Conditions of Entry

- 1 The competition is open to all photographers.
- 2 Subject matter may be any aspect of nature including plant life, animal life, natural phenomena and landscapes, geological and ecological features and the influence of man on the natural environment. Pictures relating to our own region are of particular interest.
- 3 Each entrant may submit up to four black and white prints 5 by 7 inches or larger. Each print must be mounted on a suitable cardboard mount not less than 8 by 10 inches nor more than 16 by 20 inches, with title showing if desired. Name and address of entrant, title of the print and number to correspond with entry form* must be shown on the back of the mount.
- 4 All pictures must have been photographed by the entrant but the production and mounting of the finished print need not be the work of the entrant.
- 5 Entries must be in the hands of the Committee by April 10, 1971. The address for mailing or delivering entries will be announced in the next issue of Trail & Landscape.
- 6 Permission to reproduce any entry in publications of the Ottawa Field-Naturalists' Club is presumed.
- 7 Entries will be judged by a committee selected by the OFNC executive and awards will be made for First, Second and Third entries. All entries accepted by the judges for exhibition will be displayed at an OFNC meeting in April. Details in the next issue of T & L.
- 8 Entries will be returned to participants following the competition. Sufficient postage should be included with entry form to cover cost of return if by mail.
- 9 The OFNC will take all possible care to safeguard prints but will not be responsible for any loss or damage to entries during transit or at any phase of competition.

A MARCH EVENT As a follow-up to our astronomical lecture we are planning a visit to the Observatory at the Experimental Farm. Weather permitting we hope to see the Moon and planet Saturn. The trip is planned for 9 March at 9:30 p.m. Owing to accommodation problems exact numbers must be known two weeks in advance. If you wish to attend please call Ewen Todd, 225-4316, not later than 22 February.

SHALL WE MEET? Local OFNC membership now is about 600, an increase of nearly 400 in the past four years. New members ask when our meeting night is, and are disappointed to find there is no regular time. To satisfy those who would like to meet more often we are increasing the number of evening meetings to one or more a month during winter. We are experimenting by providing an informal discussion about birding, with refreshments available after. If this kind of meeting is successful, more will be planned, and other topics covered. Attendance at lectures and panels has been low; if you want more meetings of this type, please attend as many as you can, in fairness to those we ask to come and speak. If you have other ideas for meetings, let us know what you have in mind. Excursions and Lectures Committee
Ewen C. D. Todd, Chairman

—HOW TO BE USEFUL—

The OFNC will host the 1971 annual meeting of the FEDERATION OF ONTARIO NATURALISTS, April 23-24-25.

This is your opportunity to participate!

If you wish to volunteer for committee work or to act as a host, please phone Elva MacKenzie, 722-8847.

Help make your fellow naturalists welcome.

PHONE NOW!

EXCHANGE REQUEST Mary Reeve's son Bill, a biologist on staff of the Dayton Museum of Natural History, Dayton, Ohio, says in a recent letter, "If you know anyone who has a run of the ONTARIO NATURALIST going back some years, I would be delighted to have them as a donation to our library in exchange for back numbers of THE EXPLORER for the past five years; it has been a quarterly for the last two years and was issued 6 times a year before that." If interested, phone Mrs. Reeve, 722-1858.

O F N C EVENTS IN JANUARY AND FEBRUARY

Arranged by the Excursions and Lectures Committee
Ewen C. D. Todd, Chairman

- Tuesday 12
January
- 'ROCK WATCHING IN CANADA'S CAPITAL AREA'
Speaker: D.M. Baird, Director, National
Museum of Science & Technology
Meet: Auditorium, Museum of Science
and Technology
1867 St. Laurent Blvd.
Time: 8:00 p.m.
Dr. Baird is very familiar with local
geology and has written 'A Guide to the
Geology and Scenery of the National
Capital Area' (Queen's Printer).
- Wednesday 27
January
- DISCUSSION: BIRD ROUND-UP
Leader: George McGee
Meet: St. Andrew's Presbyterian Church
Kent & Wellington (Kent St. door)
Time: 8:00 p.m.
Don't miss this opportunity to have an
informal meeting to discuss your finds
and failures in the birding field.
Refreshments will be available.
- Tuesday 9
February
- LECTURE: 'THE NEW ASTRONOMY'
Speaker: Dr. L. Higgs, Radio-Astronomer,
Astrophysics Branch, N.R.C.
Meet: Auditorium, National Museum,
McLeod Street
Time: 8:00 p.m.
The lecture will be centred on some of
the problems that have arisen in the
astronomical field in recent years,
resulting from fascinating new finds
in the universe.
- Sunday 28
February
- FIELD TRIP: WINTER BIRDS
Leader: Bill Holland
Meet: Arboretum, Experimental Farm
Time: 9:00 a.m.
Half day only; bring a snack.

IMPORTANT: See note on opposite page

T R A I L & L A N D S C A P E

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